

a circuit board having a mounting pad provided with an adhesive material in a mounting region;

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a mounting plate formed of a thermally conductive material and defining a plurality of adhesive flow openings therethrough, said mounting plate having a first major surface being positioned on said mounting pad of said circuit board;

a heat dissipation element thermally connected to said mounting plate and being spaced from said circuit board, said heat dissipating element being disposed in a position to receive air flow on both sides; and

a heat generating component mounted on said mounting plate at a second major surface opposite said first major surface, said heat dissipating element being spaced from said heat generating component to permit air flow between said heat dissipating element and said heat generating component.

9.(Amended) A heat sink assembly, comprising:

a circuit board having a mounting pad provided with an adhesive material in a mounting region;

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a mounting plate formed of a thermally conductive material and defining a plurality of adhesive flow openings therethrough, said mounting plate having a first major surface being positioned on said mounting pad of said circuit board;

a heat dissipation element thermally connected to said mounting plate and being spaced from said circuit board, said heat dissipating element being disposed in a position to receive air flow on both sides;

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a heat generating component mounted on said mounting plate at a second major surface opposite said first major surface, and
a channel along an edge of said mounting plate, said channel receiving a tab extending from said heat generating component.

13.(Twice Amended) A heat sink for a surface mounted heat generating component, comprising:

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a mounting plate of a generally planer configuration defining a plurality of openings therethrough for adhesive flow through said openings;
an extension member extending generally perpendicular to said mounting plate; and
a heat dissipation element connected to said extension member, said heat dissipation element and said extension member and said mounting plate being thermally conductive and said heat dissipating element being spaced from the heat generating component in a direction perpendicular to a major surface of said heat generating component.

14. (Amended) A surface mountable heat sink for a component, comprising:

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a substantially planar mounting plate having an outer extent substantially a same shape and dimensions as a footprint of the component, said mounting plate defining openings extending therethrough;
a vertical portion extending at a substantially right angle from said mounting plate, said vertical portion having a first end at said mounting plate and a second end opposite said first end; and

a heat dissipating fin connected to said second end of said vertical portion, said heat dissipating fin having an extent in a direction substantially parallel to said mounting plate and space therefrom, said heat dissipating fin being spaced from the component in a direction perpendicular to said mounting plate when the component is mounted on said mounting plate so as to define an air gap between said heat dissipating fin and the component.

15.(Amended) A surface mountable heat sink and component, comprising:

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a substantially planar mounting plate having an outer extent substantially a same shape and dimensions as a footprint of the component, said mounting plate defining opening extending therethrough;

a vertical portion extending at a substantially right angle from said mounting plate, said vertical portion having a first end at said mounting plate and a second end opposite said first end; and

a heat dissipating fin connected to said second end of said vertical portion, said heat dissipating fin having an extent in a direction substantially parallel to said mounting plate and space therefrom, said heat dissipating fin being spaced from the component when the component is mounted on said mounting plate, and

a channel between said mounting plate and said vertical portion, said channel receiving a portion of the component when the component is mounted on said mounting plate.

Add new claim 18 as follows

18. A heat sink assembly, comprising:

a circuit board having a mounting pad provided with an adhesive material in a mounting region;

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C a mounting plate formed of a thermally conductive material and defining a plurality of adhesive flow openings therethrough, said mounting plate having a first major surface being positioned on said mounting pad of said circuit board;

a heat dissipation element thermally connected to said mounting plate and being spaced from said circuit board, said heat dissipating element being disposed with an air gap below between said heat dissipating element and an air gap above said heat dissipating element; and

a heat generating component mounted on said mounting plate at a second major surface opposite said first major surface.

[Add new claim 19 as follows:]

19. A heat sink assembly as claimed in claim 1, wherein said circuit board is in a first plane, said heat dissipating element is in a second plane and said heat generating element is in a third plane, said first and second planes are spaced apart and said third plane having said heat generating element is disposed between said first and second planes.

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[Add new claim 20 as follows:]

20. A heat sink as claimed in claim 19, wherein said first and second and third planes are substantially parallel to one another.
